

brown. On the femora of the mid legs the ventral white extends on the dorsal aspect to form a white spot near the apex, the very tip being brown; the tibiae are brown except a white spot near the apex, the very tip being brown; first tarsal is basally white banded and has a white band near the apex, the tip being brown; second tarsal is basally white banded, the other tarsal joints are brown. The hind femora are silvery white except for a narrow basal brown band, a broad brown band a little beyond the mid-length of the femora, and a narrow brown band at the apex; tibiae brown; first tarsal basally white banded, and a white band near the apex; the second tarsal basally white banded, and the remainder of the tarsi are brown. Fore and mid unguis equal and uniserrate, hind simple.

Wing clear, with brown, rather long and broad-ended scales, somewhat resembling *Taniorhynchus* scales. Cells short, petioles about as long as the cells. First submarginal longer and narrower than the second posterior, bases nearly on a line; base of the third long vein and mid cross-vein meet, and the posterior cross-vein is more than twice its length interior. Halteres with white stems and heavy dark brown knobs.

*Length*: about 4.5 mm.

*Habitat*: Puerto Princessa, Palawan Island, P. I.

*Taken*: May.

Described from one specimen. A few specimens evidently of this mosquito have been previously received, but always in such bad condition that no description was possible.

## MYZOMYIA (ANOPHELES) LUDLOWII THEOBALD.

By C. S. LUDLOW,

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For sometime there has been quite a good deal of discussion as to the breeding habits of this mosquito, different observers claiming that it bred in fresh water, in blackish or salt water, and that it bred in either.

Without wishing to question the observations of any of those who have studied this *Anopheline*, and merely because there has lately appeared the definite statement, the foundation for which I do not know, that "*ludlowii* is exclusively a saline breeder,"<sup>1</sup> it seems better to publish what I myself know on this point.

The specimens which I sent to Mr. Theobald, and on which the species was founded, were taken by Dr. Graves in the Province of

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<sup>1</sup> The mosquitoes of North and Central America and the West Indies. L. O. Howard, H. G. Dyar and F. Knab. 1912.

Abra, Island of Luzon, on the Benguet Road during the construction of that road. The location is definitely inland; the camp was in a deep canyon, where Dr. Graves wrote me "the Mountains are so high we see the sun only between 9 a. m. and 3 p. m." The Benguet River runs through this canyon, and there is no sea or blackish water within many miles. These *Anophelines* were there in great numbers, the collection from which the specimens were sent to Mr. Theobald, containing about fifty specimens, *all* of them this one species.

It is also of interest to note that for a while no other species were taken, although no effort was made to that end, and during that time malarial fever was very prevalent.

This can only mean that *M. Ludlowii* may breed in fresh water, but this, by no means precludes its breeding also in salt or brackish water, for a sufficient number of other *Anophelines* are shown to breed indifferently in fresh or salt water to make it at least allowable to suppose that *ludlowii* may do the same.

## NEW OR LITTLE-KNOWN NEOTROPICAL HEXATOMINI (*TIPULIDÆ*, *DIPTERA*.)

BY CHAS. P. ALEXANDER,  
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The following species were included in collections received for study from the American Museum of Natural History (Mr. Grossbeck); United States National Museum (Mr. Knab); Cornell University (Dr. Bradley); and the Museu Rocha (Señor Rocha). I express my sincere thanks to the above-named gentlemen for this and other favors received from them. The present paper deals with the *Hexatomini*, an extensive tribe of crane-flies, which reaches its maximum of specific development in the tropics. The study of these forms was conducted as research in Systematic Entomology at Cornell University under Dr. J. Chester Bradley, to whom I am indebted now, as before, for advice and many valuable suggestions.

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<sup>1</sup> Entomological Laboratory, Cornell University.